5. REPORTED DISCHARGE AND PROPOSED LIMITS

Description of Discharge - Outfalls 002 and 003 – Storm water runoff

Effluent Characteristics	Reported Discharge Monthly Average	Reported Discharge Daily Maximum	Proposed Limits Monthly Average	Proposed Limits Daily Maximum	Applicable Water Quality Criteria and/or Effluent Guidelines
Flow (MGD)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Suspended Solids (mg/l)	NA	NA	NA	100	401 KAR 5:080, Section 1(2)(c)2
Chlorides (mg/l)	NA	NA	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
Specific Conductance (umho/cm)	NA	NA	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
Sulfate (mg/l)	NA	NA	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
Total Organic Carbon	NA	NA	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
Sodium (mg/l)	NA	NA	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
BOD_5 (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Iron (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Arsenic (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Beryllium (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Cadmium (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Copper (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Lead (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Mercury (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Nickel (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Selenium (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Silver (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Thallium (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Recoverable Zinc (mg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Hardness (as mg/l $CaCO_3$)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
Total Purgeable Halocarbons (µg/l)	NA	NA	NA	Report	401 KAR 5:065, Section 2(8)
pH (min/max)	NA	NA	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4

6. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfalls 002 and 003 - Storm water runoff

b. Effluent Characteristics

Total Recoverable Arsenic	Total Recoverable Beryllium	pH
Total Recoverable Cadmium	Total Recoverable Copper	Flow
Total Suspended Solids	Total Recoverable Lead	BOD_5
Total Recoverable Mercury	Total Recoverable Nickel	Hardness
Total Recoverable Selenium	Total Recoverable Silver	
Total Recoverable Thallium	Total Recoverable Zinc	
Total Recoverable Iron	Total Purgeable Halocarbons	

d. Pertinent Factors

None

d. Monitoring Requirements

Instantaneous flow measurements shall be collected once per month.

Total Suspended Solids, Iron (TR), BOD_5 and pH shall be monitored once per month by grab sample. Arsenic (TR), Beryllium (TR), Cadmium (TR), Copper (TR), Lead (TR), Mercury (TR), Nickel (TR), Selenium (TR), Silver (TR), Thallium (TR), Zinc (TR), and Hardness shall be monitored quarterly by grab sample. Total Purgeable Halocarbons shall be monitored semi-annually by grab sample.

e. Justification of Limits

The Kentucky Administrative Regulations (KARs) cited below has been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes (KRSs).

Flow, Hardness, Iron (TR), Arsenic (TR), Beryllium (TR), Cadmium (TR), Copper (TR), Lead (TR), Mercury (TR), Nickel (TR), Selenium (TR), Silver (TR), Thallium (TR), Zinc (TR), Total Purgeable Halocarbons and BOD_5
The monitoring requirements for these parameters are consistent with the requirements of 401 KAR 5:065, Section 2(8).

Total Suspended Solids
The limits and requirements for this parameter are consistent with the requirements of 401 KAR 5:080, Section 1(2)(c)2. These limits are representative of the Division of Water's "Best Professional Judgment" (BPJ) determination of the "Best Practicable Control Technology Currently Available" (BPT) and "Best Available Technology Economically Achievable" (BAT) requirements for these types of discharges.

pH
The limits and requirements for this parameter are consistent with the requirements of 401 KAR 10:031, Section 4(1)(b).

6. METHODOLOGY USED IN DETERMINING LIMITATIONS - continued

e. Justification of Limits

Sodium, Sulfate, Total Organic Carbon, Specific Conductance and Chlorides
The removal of these parameters from the permit is consistent with 401 KAR 5:080, Section 1(2)(c)2. A review of the DMR data for the previous permit indicated that reasonable potential did not exist for these parameters to be limited or monitored in the permit. Therefore, it is the "Best Professional Judgment" (BPJ) of the Division of Water that these parameters be removed from the permit.

7. **ANTIDEGRADATION**

The conditions of 401 KAR 5:029, Section 1 has been satisfied by this permit action. Since this permit action involves reissuance of an existing permit, and does not propose an expanded discharge, a review under 401 KAR 5:030 Section 1 is not applicable.

8. **PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

Permittee shall comply with the effluent limitations by the effective date of the permit.

9. **PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

Best Management Practices (BMP) Plan
Pursuant to 401 KAR 5:065, Section 2(10), a BMP requirement shall be included: to control or abate the discharge of pollutants from ancillary areas containing toxic or hazardous substances or those substances which could result in an environmental emergency; where numeric effluent limitations are infeasible; or to carry out the purposes and intent of KRS 224. The facility has several areas where support activities occur which have a potential of the discharge of such substances through storm water runoff or spillage. Some of these areas will drain to present wastewater treatment plants, others will not.

Outfall Signage
It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 1(2)(c)2, that all permittees post a marker at all discharge locations and/or monitoring points. The marker shall be of sufficient size to display the Permittee Name, KPDES permit and outfall numbers in 2 inch letters and shall be prominently displayed. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.

10. **PERMIT DURATION**

Five (5) years. This facility is in the Four Rivers, Upper & Lower Cumberland Management Unit as per the Kentucky Watershed Management Framework.

11. **PERMIT INFORMATION**

The application, draft permit fact sheet, public notice, comments received, and additional information is available by writing the Division of Water at 200 Fair Oaks Lane, Frankfort Office Park, Frankfort, Kentucky 40601.

12. **REFERENCES AND CITED DOCUMENTS**

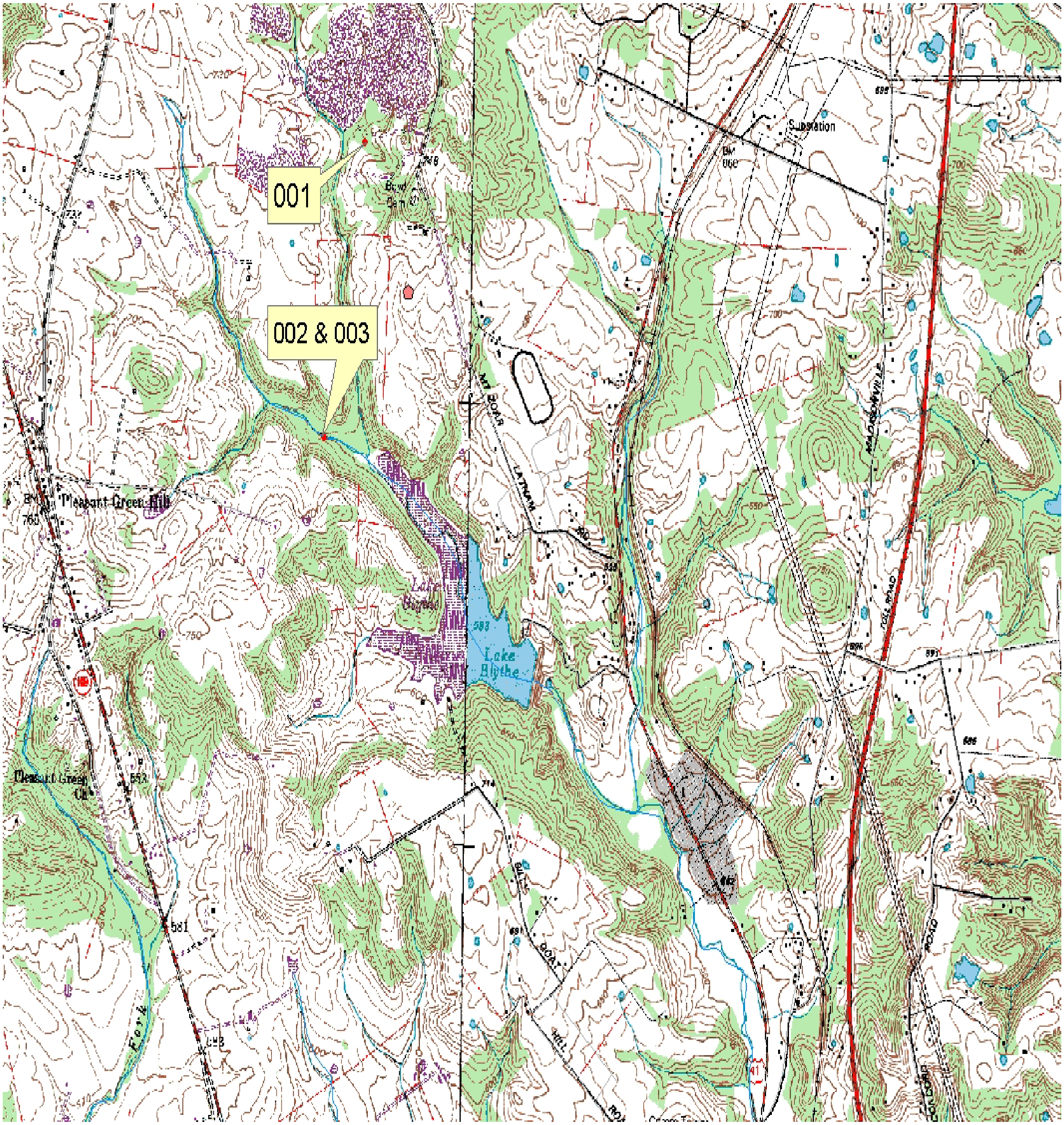
All material and documents referenced or cited in this fact sheet are parts of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

13. **CONTACT**

For further information contact the individual identified on the Public Notice or the Permit Writer – Mahmoud Sartipi at (502) 564-3410, extension 4954 or e-mail Mahmoud.Sartipi@ky.gov.

14. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by 401 KAR 5:075, Section 4(2)(e).


001
002 & 003
Substation
Pleasant Green Hill
Lake Blythe

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Permit Writer	Mahmoud Sartipi	
Date Entered	6/3/2009	
Facility Name	Hopkinsville Landfill	
KPDES Number	KY0098485	
Outfall Number	001	
Case	Reissuance	
Status: **Is this an existing facility – Enter "E"** **Is this an existing facility with an increase in pollutant load – Enter "I"** **Is this a new facility – Enter "N"** **Is this a regional facility with an approved up-to-date 201 plan – Enter "R"** **Has the permittee made a successful alternatives analysis/socioeconomic demonstration – Enter "A"**	E	
Receiving Water Name	UT of White Creek	
Discharge Mile Point	4.3	
Public Water Supply Name	Hopkinsville Water Environmental Authority	
Intake Water Name	Hopkinsville Water Environmental Authority	
Intake Mile Point	74.83	
Total Effluent Flow (Q_T)	0.0664	MGD
Receiving Water 7Q10 (Q_{RW7Q10})	0	cfs
Receiving Water Harmonic Mean (Q_{RWHM})	0	cfs
Receiving Water pH	7.5	SU
Receiving Water Temperature	20.00	^{o}C
Intake Water 7Q10 (Q_{IW7Q10})	0	cfs
Intake Water Harmonic Mean (Q_{IWHM})	0.2	cfs
Effluent Hardness	129	(as mg/l CaCO3)
Receiving Water Hardness	100	(as mg/l CaCO3)
Zone of Initial Dilution (ZID)	1	
Mixing Zone (MZ)	0	
Acute to Chronic Ratio (ACR)	0.1	
Impaired	No	
Permittee agrees to accept no mixing zone for bioaccumulative or persistent pollutants prior to 09/08/2014	yes	

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Calculation Methodology

Definitions

Acute to Chronic Ratio	ACR	Total Effluent Flow	Q_T
Aquatic Life Acute Criteria	C_A	Receiving Water 7Q10	Q_{RW7Q10}
Aquatic Life Chronic Criteria	C_C	Receiving Water Harmonic Mean	Q_{RWHM}
Human Health Criteria - Fish Only	C_{HHFO}	Intake Water 7Q10	Q_{IW7Q10}
Human Health Criteria - Fish & Water	C_{HHFW}	Intake Water Harmonic Mean	Q_{IWHM}
End of Pipe Effluent Limit	C_T	Zone of Initial Dilution	ZID
Instream Background Concentration	C_U	Mixing Zone	MZ
Toxicity Units - Acute	TU_a	Toxicity Units - Chronic	TU_c
Effluent Hardness	H_T	Receiving Water Hardness	H_{RW}

Aquatic Life - Chemical Specific

Acute

NO ZID given $C_T = C_A$

ZID given $C_T = (C_A - C_U) \times (ZID)$

Chronic Mixing Zone / Complete Mix

$$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\}/Q_T$$

Human Health - Chemical Specific

Fish Only: Mixing Zone / Complete Mix

Carcinogen / Non-Carcinogen $C_T = \{C_{HHFO}[Q_T+(MZ)(Q_{RWHM})] - C_U(MZ)(Q_{RWHM})\}/Q_T$

Fish & Water Only: Mixing Zone / Applicable at point of withdrawal

Carcinogen $C_T = \{C_{HHFW}[Q_T+(Q_{IWHM})] - C_U(Q_{IWHM})\}/Q_T$

Non-Carcinogen $C_T = \{C_{HHFW}[Q_T+(Q_{IW7Q10})] - C_U(Q_{IW7Q10})\}/Q_T$

Aquatic Life - Whole Effluent Toxicity

Acute (Units TU_a)

NO ZID given CT = CA

ZID given $C_T = (C_A - C_U) \times (ZID)$

Chronic Mixing Zone / Complete Mix (Units TUc)

$$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\}/Q_T$$

Conversion of TU_c to TU_a: $TU_c \times ACR = TU_a$

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Metal Aquatic Criteria

Pollutant	Acute Criteria	Chronic Criteria
Total Recoverable Cadmium	$e^{(1.0166\ (\ln Hardness) - 3.924)}$	$e^{(0.7409\ (\ln Hardness) - 4.719)}$
Chromium III	$e^{(0.8190\ (\ln Hardness) + 3.7256)}$	$e^{(0.8190\ (\ln Hardness) + 0.6848)}$
Total Recoverable Copper	$e^{(0.9422\ (\ln Hardness) - 1.700)}$	$e^{(0.8545\ (\ln Hardness) - 1.702)}$
Total Recoverable Lead	$e^{(1.273\ (\ln Hardness) - 1.460)}$	$e^{(1.273\ (\ln Hardness) - 4.705)}$
Total Recoverable Nickel	$e^{(0.8460\ (\ln Hardness) + 2.255)}$	$e^{(0.8460(\ln Hardness) + 0.0584)}$
Total Recoverable Silver	$e^{(1.72\ (\ln Hardness) - 6.59)}$	
Total Recoverable Zinc	$e^{(0.8473\ (\ln Hardness) + 0.884)}$	$e^{(0.8473\ (\ln Hardness) + 0.884)}$

Hardness (as mg/l $CaCO_3$)

Zone Initial Dilution (ZID) $H_{RW} + [H_T + H_{RW}]/ZID$

Mixing Zone $[(Q_{RW7Q10})(MZ)(H_{RW}) + (Q_T)(H_T)]/[(QRW7Q10)(MZ)+(QT)]$

Total Ammonia Criteria

Chronic - applies state wide - unionzed criteria of 0.05 mg/l $[0.05*(1+10^{(pka-pH)})]/1.2$ $pka=(0.0902+(2730/(273.1+T))$ T = Temperature ^oC

Acute - applies to the Ohio River (ORSANCO Criteria) $[0.411/(1+10^{(7.204-pH)})]+[58.4/(1+10^{(pH-7.204)})]$

Bioaccumulative or Persistent

For new facilities after September 8, 2004 mixing zones shall not be granted for bioaccumulative or persistent pollutants of concern.

Mixing zones for bioaccumulative or persistent pollutants of concerned assigned prior to September 8, 2004 shall expire no later than September 8, 2014, unless the permittee agrees to expiration of the mixing zone prior to that date.

Therefore, the application of the more stringent criteria of Human Health Fish & Water Consumption, Human Health Fish Only Consumption, and Aquatic Life Chronic shall apply as end-of-pipe effluent limitations.

Antidegradation

If a new facility or an existing facility that will have a pollutant load increase, the effluent limits are halved unless the receiving stream is impaired or the permittee has demonstrated a negative socioeconomic or cost benefit analysis.

STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Reasonable Potential Analysis

In establishing water quality based effluent conditions the Division of Water must determine if the pollutant concentrations in the discharge will cause, have the reasonable potential to cause, or contribute to an excursion of any water standard. The process by which the Division of Water makes this determination is known as a Reasonable Potential Analysis.

A Reasonable Potential Analysis is performed by first calculating the expected effluent limitations for those pollutants with water quality criteria. The calculated limits are then compared to the concentrations reported on the KPDES permit application and/or a summarization of the values reported on the Discharge Monitoring Report (DMRs) submitted during the term of the permit. This comparison is made by dividing the reported value by the calculated effluent limitation and converting to a percentage. The following criteria are used in determining how the pollutant will be addressed in the permit.

New Permits or New Pollutants on Permit Renewals

If the reported concentration is less than 70% of the calculated effluent limit then no monitoring or limitations will be required.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is less than 12 then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is equal or greater than 12 then an effluent limitation will be required.

Permit Renewals - Existing Pollutants

If the reported concentration is less than 70% of the calculated effluent limit then and the source of the reported concentration was the DMRs for that facility and there were more than 12 DMRs utilized to determine the reported concentrations then the pollutant will be removed from the permit.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% then an effluent limitation will be required.

In all cases, the Division of Water still may exercise its Best Professional Judgment in the implementation of the results.

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Chloride	16887006	9.600000	17.000000	250.000000	1,200.000000	3.84%	1.42%	DMR	24	Remove	Remove	HH DWS	Acute
Total Residual Chlorine		0.000000	0.000000	0.011000	0.019000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Color		0.000000	0.000000	0.075000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Fluoride		0.000000	0.000000	2.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Nitrate-Nitrite (as N)	14797558	0.000000	0.000000	10.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Alpha		0.000000	0.000000	NA	15.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Beta		0.000000	0.000000	NA	50.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Radium		0.000000	0.000000	NA	5.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Sulfate (as SO4)		0.000000	0.000000	250.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Surfactants		0.000000	0.000000	0.500000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Barium	7440393	0.000000	0.000000	1.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Iron	7439896	5.850000	16.000000	1.000000	4.000000	585.00%	400.00%	DMR	27	Limit	Limit	Chronic	Acute
Total Recoverable Antimony	7440360	0.000000	0.000000	0.005600	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Arsenic	7440382	0.004920	0.007600	0.029458	0.340000	16.70%	2.24%	DMR	28	Remove	Remove	HH DWS	Acute
Total Recoverable Beryllium	7440417	0.004007	0.005000	0.004000	NA	100.18%	0.00%	DMR	28	Limit	Remove	HH DWS	NA
Total Recoverable Cadmium	7440439	0.001000	0.001000	0.000327	0.002763	305.98%	36.19%	DMR	28	Limit	Remove	Chronic	Acute
Total Recoverable Chromium	7440439	0.000000	0.000000	0.100000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Recoverable Copper	7440508	0.005420	0.008600	0.011597	0.017795	46.74%	48.33%	DMR	28	Remove	Remove	Chronic	Acute
Total Recoverable Lead	7439921	0.004120	0.007400	0.004400	0.112904	93.64%	6.55%	DMR	28	Limit	Remove	Chronic	Acute
Total Recoverable Mercury	7439976	0.000667	0.014000	0.000051	0.001700	1307.84%	823.53%	DMR	28	Limit	Limit	HH Fish	Acute
Total Recoverable Nickel	7440020	0.011530	0.042000	0.064703	0.581960	17.82%	7.22%	DMR	28	Remove	Remove	Chronic	Acute
Total Recoverable Selenium	7782492	0.004570	0.005000	0.005000	0.020000	91.40%	25.00%	DMR	28	Limit	Remove	Chronic	Acute
Total Recoverable Silver	7440224	0.001000	0.001200	NA	0.005864	0.00%	20.46%	DMR	28	Remove	Remove	NA	Acute
Total Recoverable Thallium	7440280	0.004667	0.005000	0.001700	NA	274.53%	0.00%	DMR	28	Limit	Remove	HH DWS	NA
Total Recoverable Zinc	7440666	0.019360	0.045000	0.148669	0.148669	13.02%	30.27%	DMR	28	Remove	Remove	Chronic	Acute
Free Cyanide	57125	0.000000	0.000000	0.005200	0.022000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
2,3,7,8 Tetrachlorodibenzo P Dioxin	1746016	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acrolein	107028	0.000000	0.000000	0.190000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Acrylonitrile	107131	0.000000	0.000000	0.000150	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzene	71432	0.000000	0.000000	0.006481	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Bromoform	75252	0.000000	0.000000	0.012667	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Carbon Tetrachloride	56235	0.000000	0.000000	0.000678	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Chlorobenzene	108907	0.000000	0.000000	0.680000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Chlorodibromomethane	124481	0.000000	0.000000	0.001178	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Chloroform	67663	0.000000	0.000000	0.016791	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Dichlorobromomethane	75274	0.000000	0.000000	0.001620	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2-Dichloroethane	107062	0.000000	0.000000	0.001119	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,1-Dichloroethylene	75354	0.000000	0.000000	0.000168	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2-Dichloropropane	78875	0.000000	0.000000	0.000147	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,3-Dichloropropene	542756	0.000000	0.000000	0.010000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Ethylbenzene	100414	0.000000	0.000000	3.100000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Methyl Bromide	74839	0.000000	0.000000	0.047000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Methylene Chloride	75092	0.000000	0.000000	0.013551	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,1,2,2-Tetrachloroethane	79345	0.000000	0.000000	0.000501	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Tetrachloroethylene	127184	0.000000	0.000000	0.002033	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Toluene	108883	0.002000	0.002300	6.800000	NA	0.03%	0.00%	Application	4	None	None	HH DWS	NA
1,2-Trans-Dichloroethylene	156605	0.000000	0.000000	2.062048	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,1,1-Trichloroethane	71556	0.000000	0.000000	0.200000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,1,2-Trichloroethane	79005	0.000000	0.000000	0.001738	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Trichloroethylene	79016	0.000000	0.000000	0.007364	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Vinyl Chloride	75014	0.000000	0.000000	0.005892	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2-Chlorophenol	95578	0.000000	0.000000	0.081000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4-Dichlorophenol	120832	0.000000	0.000000	0.077000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4-Dimethylphenol	105679	0.000000	0.000000	0.380000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4-Dinitrophenol	51285	0.000000	0.000000	0.069000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Pentachlorophenol	87865	0.000000	0.000000	0.000795	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Phenol	108952	0.000000	0.000000	21.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4,6-Trichlorophenol	88062	0.000000	0.000000	0.002400	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Acenaphthene	83329	0.000000	0.000000	0.670000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Anthracene	120127	0.000000	0.000000	8.300000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzidine	92875	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Benzo(a)anthracene	56553	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzo(a)pyrene	50328	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzo(k)fluoranthene	205992	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Bis(2-chloroisopropyl)ether	108601	0.000000	0.000000	1.400000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Bis(2-ethylhexyl)phthalate	117817	0.000000	0.000000	0.002200	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Butylbenzyl phthalate	85687	0.000000	0.000000	1.500000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2-Chloronaphthalene	91587	0.000000	0.000000	1.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Chrysene	218019	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Dibenzo(a,h)anthracene	53703	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2-Dichlorobenzene	95501	0.000000	0.000000	2.700000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,3-Dichlorobenzene	541731	0.000000	0.000000	0.320000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,4-Dichlorobenzene	106467	0.000000	0.000000	0.400000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
3,3-Dichlorobenzidine	91941	0.000000	0.000000	0.000028	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Diethyl phthalate	84662	0.000000	0.000000	17.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Dimethyl phthalate	131113	0.000000	0.000000	270.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Di-n-butyl phthalate	84742	0.000000	0.000000	2.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4-Dinitrotoluene	121142	0.000000	0.000000	0.000324	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2-Diphenylhydrazine	122667	0.000000	0.000000	0.000106	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Fluoranthene	206440	0.000000	0.000000	0.130000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Fluorene	86737	0.000000	0.000000	1.100000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Hexachlorobenzene	118741	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorobutadiene	87683	0.000000	0.000000	0.001296	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Hexachlorocyclopentadiene	77474	0.000000	0.000000	0.240000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Hexachloroethane	67721	0.000000	0.000000	0.003300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Ideno(1,2,3-cd)pyrene	193395	0.000000	0.000000	0.000004	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Isophorone	78591	0.000000	0.000000	0.035000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Nitrobenzene	98953	0.000000	0.000000	0.017000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosodimethylamine	62759	0.000000	0.000000	0.000002	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosodi-n-Propylamine	621647	0.000000	0.000000	0.000015	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosodiphenylamine	86306	0.000000	0.000000	0.006000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pyrene	129000	0.000000	0.000000	0.830000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2,4-Trichlorobenzene	120821	0.000000	0.000000	0.260000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Aldrin	309002	0.000000	0.000000	0.000000	0.003000	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
alpha-BHC	319846	0.000000	0.000000	0.000005	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Beta-BHC	319857	0.000000	0.000000	0.000017	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
gamma-BHC (Lindane)	58899	0.000000	0.000000	0.000056	0.000950	0.00%	0.00%	No Data	0	None	None	HH DWS	Acute
Chlordane	57749	0.000000	0.000000	0.000001	0.002400	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
4,4'-DDT	50293	0.000000	0.000000	0.000000	0.001100	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
4,4'-DDE	72559	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
4,4'-DDD	72548	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dieldrin	60571	0.000000	0.000000	0.000000	0.000240	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Alpha-Endosulfan	959988	0.000000	0.000000	0.000056	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Beta-Endosulfan	33213659	0.000000	0.000000	0.000056	0.000220	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endosulfan sulfate	1031078	0.000000	0.000000	0.062000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Endrin	72208	0.000000	0.000000	0.000036	0.000086	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endrin aldehyde	7421934	0.000000	0.000000	0.000290	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Heptachlor	76448	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Heptachlor epoxide	1024573	0.000000	0.000000	0.000000	0.000520	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
Polychlorinated Biphenyls (PCBs)		0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Toxaphene	8001352	0.000000	0.000000	0.000000	0.000730	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
1,2,4,5-Tetrachlorobenzene	95943	0.000000	0.000000	0.000970	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2-methyl-4,6-dinitrophenol	534521	0.000000	0.000000	0.013000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4-D	94757	0.000000	0.000000	0.206205	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4,5-TP (Silvex)	93721	0.000000	0.000000	0.010000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
2,4,5-trichlorophenol	95954	0.000000	0.000000	1.800000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Asbestos	1332214	0.000000	0.000000	20,620.481928	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Benzo(b)fluoranthene	205992	0.000000	0.000000	0.000011	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Bis(2-chloroethyl)ether	111444	0.000000	0.000000	0.000088	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Bis(chloromethyl)ether	542881	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chloropyrifos	2921882	0.000000	0.000000	0.000041	0.000083	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (III)	16065831	0.000000	0.000000	0.106164	2.221163	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chromium (VI)	18540299	0.000000	0.000000	0.011000	0.016000	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Demeton	8065483	0.000000	0.000000	0.000100	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Dinitrophenols	25550587	0.000000	0.000000	0.069000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Guthion	86500	0.000000	0.000000	0.000010	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Hexachlorocyclo-hexane-Technical	319868	0.000000	0.000000	0.000036	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Hydrogen Sulfide, Undissociated	7783064	0.000000	0.000000	0.002000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Malathion	121755	0.000000	0.000000	0.000100	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Methoxychlor	72435	0.000000	0.000000	0.000030	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Mirex	2385855	0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Nitrosamines, Other		0.000000	0.000000	0.000001	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosodibutylamine	924163	0.000000	0.000000	0.000019	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosodiethylamine	55185	0.000000	0.000000	0.000002	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
N-Nitrosopyrrolidine	930552	0.000000	0.000000	0.000047	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Parathion	56382	0.000000	0.000000	0.000013	0.000065	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Pentachlorobenzene	608935	0.000000	0.000000	0.001500	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phthalate esters		0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	NA
Total Dissolved Solids		0.000000	0.000000	750.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Tritium		0.000000	0.000000	NA	20,000.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Strontium-90		0.000000	0.000000	NA	8.000000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Uranium		0.000000	0.000000	NA	0.030000	0.00%	0.00%	No Data	0	None	None	NA	Acute
Total Ammonia		0.000000	0.000000	3.360911	19.890204	0.00%	0.00%	No Data	0	None	None	Chronic	Acute

Hardness	Chronic	Acute
Metal limitations are developed using the mixed hardness of the effluent and receiving waters	129.00	129.00

Toxicity

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum

Type of Test **Maximum** **Units** **Justification** **Percent Effluent**
Chronic 1.00 TUc Chronic 100.00%

KPDES

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KY0098485
AI NO.: 767

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

City of Hopkinsville – Hopkinsville Landfill
P.O. Box 707
Hopkinsville, Kentucky 42240

is authorized to discharge from a facility located at

Hopkinsville Landfill
Mount Zoar Road
Hopkinsville, Christian County, Kentucky 42240

to receiving waters named

Outfall 001 – Unnamed tributary of White Creek at Latitude of 36º 56′ 35″ and Longitude of 87º 30′ 25′′

Outfalls 002 & 003 – Unnamed tributary of White Creek at Latitude of 36º 55′ 55″ and Longitude of 87º 30′ 35′′

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in PARTS I, II, III, and IV hereof. The permit consists of this cover sheet, and PART I 2 pages, PART II 1 page, PART III 1 page, and PART IV 3 pages.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Date Signed

Sandra L. Gruzesky, Director
Division of Water

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601
Printed on Recycled Paper

A1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 – Storm water runoff

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS (lbs/day) Monthly Avg.	(lbs/day) Daily Max.	Other Units(Specify) Monthly Avg.	Other Units(Specify) Daily Max.	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Month	Instantaneous
Total Suspended Solids (mg/l)	N/A	N/A	Report	100	1/Month	Grab
Total Recoverable Iron (mg/l)	N/A	N/A	NA	4.0	1/Month	Grab
Total Recoverable Mercury (µg/l)	N/A	N/A	NA	1.7 2/	1/Month	Grab
BOD_5 (mg/l)	N/A	N/A	NA	Report	1/Month	Grab
Total Recoverable Cadmium (µg/l)	N/A	N/A	NA	Report 2/	1/Quarter	Grab
Total Recoverable Selenium (µg/l)	N/A	N/A	NA	Report 2/	1/Quarter	Grab
Total Recoverable Beryllium (µg/l)	N/A	N/A	Report	Report 2/	1/Quarter	Grab
Total Recoverable Lead (µg/l)	N/A	N/A	Report	Report 2/	1/Quarter	Grab
Total Recoverable Thallium (µg/l)	N/A	N/A	Report	Report 2/	1/Quarter	Grab
Hardness (as mg/l $CaCo_3$)	N/A	N/A	Report	Report 2/	1/Quarter	Grab
Total Purgeable Halocarbons (µg/l)	N/A	N/A	N/A	Report 1/ 2/	2/Year	Grab

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Month by grab sample.

There shall be no discharge of floating solids, visible foam, or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters.

THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF LEACHATE FROM THIS Outfall.

1/ The results of those parameters analyzable using EPA Method 624. See Page I-3 for the list of parameters.
2/ The laboratory sheets reporting the results of each parameter shall be submitted with the Discharge Monitoring Reports (DMRs).

A2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 002 and 003– Storm water runoff

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS (lbs/day) Monthly Avg.	(lbs/day) Daily Max.	Other Units(Specify) Monthly Avg.	Other Units(Specify) Daily Max.	MONITORING REQUIREMENTS Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Month	Instantaneous
Total Suspended Solids	N/A	N/A	N/A	100 mg/l	1/Month	Grab
BOD_5 (mg/l)	N/A	N/A	N/A	Report	1/Month	Grab
Total Recoverable Iron (mg/l)	N/A	N/A	N/A	Report	1/Month	Grab
Total Recoverable Arsenic (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Beryllium (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Cadmium (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Copper (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Lead (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Mercury (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Nickel (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Selenium (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Silver (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Thallium (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Recoverable Zinc (µg/l)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Hardness (as mg/l $CaCo_3$)	N/A	N/A	N/A	Report 2/	1/Quarter	Grab
Total Purgeable Halocarbons (µg/l)	N/A	N/A	N/A	Report 1/ 2/	2/Year	Grab

- The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/Month by grab sample.
- There shall be no discharge of floating solids, visible foam, or sheen in other than trace amounts.
- Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters.
- The abbreviation N/A means Not Applicable.

THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF LEACHATE FROM THIS FACILITY

1/ The results of those parameters analyzable using EPA Method 624. See Page I-3 for the list of parameters.
2/ The laboratory sheets reporting the results of each parameter shall be submitted with the Discharge Monitoring Reports (DMRs).

B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with all requirements on the effective date of this permit.

C. Purgeables - EPA Method 624

Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chloroethane
2-Chloroethylvinyl ether
Chloroform
Chloromethane
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethyl benzene
Methylene chloride
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
Vinyl chloride

STANDARD CONDITIONS FOR KPDES PERMIT

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

PART III

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each month must be reported on a preprinted Discharge Monitoring Report (DMR) Form which will be mailed to you. Each month's completed DMR must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the month for which monitoring results were obtained.

Division of Water
Madisonville Regional Office
Madisonville State Office Bldg.
625 Hospital Drive
Madisonville, Kentucky 42431-1683
ATTN: Supervisor

Division of Water
Surface Water Permits Branch
Permit Support Section
200 Fair Oaks Lane
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:086, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Required Detected Limits For Selected Pollutants

The following MDLs are required to demonstrate compliance of the listed pollutant with water quality based limitations.

Pollutant	MDL (µg/l)	Pollutant	MDL(µg/l)
Total Recoverable Arsenic	1.0	Total Recoverable Beryllium	1.0
Total Recoverable Cadmium	0.01	Total Recoverable Copper	1.0
Total Recoverable Lead	1.0	Total Recoverable Mercury	0.02
Total Recoverable Nickel	1.0	Total Recoverable Selenium	1.0
Total Recoverable Silver	1.0	Total Recoverable Thallium	1.0
Total Recoverable Zinc	10.0	Total Purgeable Halocarbons	0.03

D. Outfall Signage

The permittee shall post a permanent marker at all discharge locations and/or monitoring points. The marker shall be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and shall be posted as near as possible to the actual sampling location.

PART IV
BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.01-010(35) and who have ancillary manufacturing operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.01-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.

2. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) plan consistent with 401 KAR 5:065, Section 2(10) pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through plant site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage. A Best Management Practices (BMP) plan will be prepared by the permittee unless the permittee can demonstrate through the submission of a BMP outline that the elements and intent of the BMP have been fulfilled through the use of existing plans such as the Spill Prevention Control and Countermeasure (SPCC) plans, contingency plans, and other applicable documents.

3. Implementation

If this is the first time for the BMP requirement, then the plan shall be developed and submitted to the Division of Water within 90 days of the effective date of the permit. Implementation shall be within 180 days of that submission. For permit renewals the plan in effect at the time of permit reissuance shall remain in effect. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be submitted to the Division of Water and implemented as soon as possible.

4. General Requirements

The BMP plan shall:

a. Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.

b. Establish specific objectives for the control of toxic and hazardous pollutants.

(1) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants," the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.

c. Establish specific Best Management Practices to meet the objectives identified under paragraph b of this section, addressing each component or system capable of causing a release of "BMP pollutants."
d. Include any special conditions established in part b of this section.
e. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document," and shall include the following baseline BMPs as a minimum.

a. BMP Committee
b. Reporting of BMP Incidents
c. Risk Identification and Assessment
d. Employee Training
e. Inspections and Records
f. Preventive Maintenance
g. Good Housekeeping
h. Materials Compatibility
i. Security
j. Materials Inventory

6. SPCC Plans

The BMP plan may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the Act and 40 CFR Part 151, and may incorporate any part of such plans into the BMP plan by reference.

7. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with the regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

8. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available to representatives of the Division of Water upon request. Copies of modified BMP Plans shall be submitted within thirty (30) days of completion to the following:

Division of Water
Madisonville Regional Office
Madisonville State Office Bldg.
625 Hospital Drive
Madisonville, Kentucky 42431-1683
ATTN: Supervisor

Division of Water
Surface Water Permits Branch
Permit Support Section
200 Fair Oaks Lane
Frankfort, Kentucky 40601

9. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in the release of "BMP pollutants."

10. Modification for Ineffectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of "BMP pollutants," then the specific objectives and requirements under paragraphs b and c of Section 4, the permit, and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concerns.

SECTION B. SPECIFIC CONDITIONS

N/A